# MARTHASE SEARCH REQUEST FORM

Access DB#

Scientific and Technical Information Center

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If more than one search is submi	tted, please prioriti	ze searches in ord	ler of need.	*****	*****
Please provide a detailed statement of the s Include the elected species or structures, ke utility of the invention. Define any terms t known. Please attach a copy of the cover s	earch topic, and describe eywords, synonyms, acro hat may have a special m heet, pertinent claims, an	as specifically as possi nyms, and registry num leaning. Give examples d abstract.	ble the subject abers, and comb s or relevant cit	matter to be searche one with the concep ations, authors, etc.	t or
Title of Invention:   Ymb br 7  Inventors (please provide full names):	ors of setin	u protease	activit	) -y	
Inventors (please provide full names):	MADISON:	E. L.		0	
Earliest Priority Filing Date: Sep** *For Sequence Searches Only* Please include appropriate serial number.	1,8, 2000 de all pertinent information	(parent, child, divisional	l, or issued paten	t numbers) along wit	h the
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Online Time.	Other	Other (specify)			

PTO-1590 (1-2000)

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FILE COVERS 1947 - 17 Jul 2001 VOL 135 ISS 4 FILE LAST UPDATED: 16 Jul 2001 (20010716/ED)

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GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE

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L4 6 SEA FILE=HCAPLUS ABB=ON PLU=CN L3

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L4 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER: 2001:283983 HCAPLUS

DOCUMENT NUMBER: 134:311435

TITLE: Preparation of inhibitors of factor Xa having an

arginine or arginine aldehyde mimic

INVENTOR(S): Semple, Joseph Edward; Brunck, Terence Kevin; Levy,

Odile Esther; Tamura, Susan Y. PATENT ASSIGNEE(S): Corvas International, Inc., USA

SOURCE: PCT Int. Appl., 163 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 2001027141 A1 20010419 WO 2000-US27615 20001006

W: CA, JP

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.:

LN. INFO.: US 1999-414903 A 19991008

OTHER SOURCE(S): MARPAT 134:311435

GΙ

AB Peptidyl aldehydes I [X = SO2, NR'SO2 (R' = H, alkyl, aryl, aralkyl), CO, O2C, NHCO, or a direct link; R1 = (un)substituted alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, aralkyl, H (when X is a direct link), etc.; R2 = -(CHR8)x(CH2)x1-T-J, where X = 0 or 1, X1 = 0-6, R8 = H, alkyl, T is a divalent cycloalkyl, aryl, heteroaryl, or heterocyclyl radical, and J is C(:E)-D or -NHC(:E)-D, where D is R6 or NR6R7 (R6, R7 = H, aryl, alkyl, provided that D .noteq. H) and E is O, S or NR6; R3 = H,

(un) substituted alkyl, cycloalkyl, alkenyl, aryl, aralkyl, heteroaralkyl; R4 = H, alkyl; R5 - (CH2)dNHC(:NH)NH2 (d = 0-5), or amidino-substituted cyclohexane, piperidine (at 1-position), or benzene, all linked at the 3or 4-position] having an arginine or arginine mimic at P3 are selective inhibitors of certain serine proteases, including factor Xa. These compds. are useful in prevention and treatment of conditions characterized by abnormal thrombosis in mammals. Thus, compd. II was prepd. by a multistep procedure from Boc-D-Phe(p-NO2)-OH (Boc = tert-butoxycarbonyl), glycine Me ester hydrochloride, benzylsulfonyl chloride, bis-Boc-S-methylisothiourea, and cycloArg(NO2)OEt.HCl. Inhibitory test data (IC50 values for factor Xa, thrombin, and trypsin) are tabulated for compds. of the invention.

ΙT 334953-82-1P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of inhibitors of factor Xa having an arginine or arginine aldehyde mimic)

REFERENCE COUNT:

REFERENCE(S):

(1) Marlowe, C; WO 9640743 A 1996 HCAPLUS

(2) Miller, T; US 5371072 A 1994 HCAPLUS

(3) Tamura, S; BIOORGANIC & MEDICINAL CHEMISTRY LETTERS 2000, V10(8), P745 HCAPLUS

ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2001 ACS 2001:241742 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

134:266567

TITLE:

Preparation of ketoheterocyclic peptide derivatives as

inhibitors of factor Xa

INVENTOR(S):

Scarborough, Robert M.; Marlowe, Charles K.; Zhu,

Bing-Yan

PATENT ASSIGNEE(S):

COR Therapeutics, Inc., USA

SOURCE:

U.S., 24 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

GI

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6211154	В1	20010403	US 1995-480491	19950607
OTHER SOURCE(S):	MA	RPAT 134:266567		

$$Z-Q-(CH_2)_{m} R^{4} R^{3} J (CH_2)_{n}-A-X$$
 $W-G$ 
 $R^{5} E R^{6} R^{2} R^{1} O$ 

Ketoheterocyclic peptide derivs. I [m, n = 0-4; A = piperidinyl,AB pyrrolidinyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, Ph, C3-6 heteroaryl, or is absent; D = N, CH, NCH2, NCH2CH2, CHCH2; E, J = O, H2; G

#### Walicka 09/657986

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= N, CH, H; M = N, NH, NMe, O, S, S(O), SO2, CH2, or is absent; Q =
     piperidinyl, pyrrolidinyl, C3-8 cycloalkyl, naphthyl, pyridyl,
     (un) substituted Ph or is absent; R1-R3 = H, C1-3 alkyl; R2R3 = CH2YCH2; Y
     = NH, S, O, CH2, CHOH, CH2CH2, CO; R4 = H, Me; R5 = H, C1-3 alkyl, or is
     absent if G = H; R6 = H, Me; U = CHR7(CH2)nCHR8, K(R7):K(R8), Q1-Q3; R7,
     R8 = H, C1-10 alkyl, aryl, arylalkyl, halo, NO2, substituted amino, OH,
     acyloxy, CO2H, CN, etc; K = C, N; W = H, arylacyl, heteroarylacyl,
     arylC1-3 alkylsulfonyl, (un)substituted arylsulfonyl, arylC1-4
     alkenylsulfonyl, C1-8 alkylsulfonyl, heteroarylC1-3 alkylsulfonyl,
     heteroarylsulfonyl, aryloxycarbonyl, C1-6 alkyloxycarbonyl, arylC1-3
     alkyloxycarbonyl, arylaminocarbonyl, C1-6 alkylaminocarbonyl, arylC1-3
     alkylaminocarbonyl, carboxyC0-3 alkylcarbonyl, or is absent if G = H; X, Z
     = H, C1-3 alkyl, NR'R'', NHC(NR'R''):NH, NHC(NHR'):NR'', NHCR':NR'', SC(NR'R''):NH, SC(NHR'):NR'', C(NR'R''):NH, C(NHR'):NR'', CR':NR''; R',
     R'' = H, C1-6 alkyl, arylC1-3 alkyl, aryl; R'R'' = cyclic ring contg.
     (CH2)p, p = 2-5] or their pharmaceutically acceptable salts were prepd.
     for inhibition of factor Xa. I are useful in vitro or in vivo for
     preventing or treating coagulation disorders. Thus, H-D-Arg-Gly-Arg-
     thiazole, prepd. in several steps from thiazole, protected arginine
     derivs., and glycine, inhibited factor Xa, prothrombinase, and thrombin
     with IC50 values of 0.011, 0.010, and 41 .mu.M, resp., while
     PhCH2SO2-D-Arg-Gly-Arg-thiazole showed IC50 values of 0.00065, 0.00045,
     and 10 .mu.M, resp.
     186304-25-6P 186304-32-5P 186304-41-6P
     186304-70-1P 186304-89-2P 186305-33-9P
     186305-78-2P 186305-89-5P
     RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (prepn. of ketoheterocyclic peptide derivs. as inhibitors of factor Xa)
REFERENCE COUNT:
                          (1) Abe; US 5153176 1992 HCAPLUS
```

REFERENCE(S):

- (2) Anon; EP 0195212 A3 1986 HCAPLUS
- (3) Anon; EP 0275101 A3 1988 HCAPLUS
- (4) Anon; EP 0364344 A3 1990 HCAPLUS
- (5) Anon; EP 0410411 A2 1991 HCAPLUS
- ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

2000:96001 HCAPLUS

DOCUMENT NUMBER:

132:137734

TITLE:

IT

Preparation of ketoheterocyclic peptide derivatives as

inhibitors of factor Xa

INVENTOR(S):

Scarborough, Robert M.; Marlowe, Charles K.; Zhu,

Bing-yan

PATENT ASSIGNEE(S):

COR Therapeutics, Inc., USA

SOURCE:

U.S., 25 pp.

DOCUMENT TYPE:

CODEN: USXXAM

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6022861	À	20000208	US 1995-486213	19950607
OTHER SOURCE(S):	MA	RPAT 132:137734		

Ketoheterocyclic peptide derivs. I [m, n = 0-4; A = piperidinyl,AB pyrrolidinyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, Ph, C3-6 heteroaryl, or is absent; D = N, CH, NCH2, NCH2CH2, CHCH2; E = O, H2; G = N, CH, H; M = N, NH, NMe, O, S, S(O), SO2, CH2, or is absent; Q = piperidinyl, pyrrolidinyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, Ph, C3-6 heteroaryl, or is absent; J = 0, H2; R1-R3 = H, C1-3 alkyl; R2R3 = CH2YCH2; Y = NH, S, O, CH2, CHOH, CH2CH2, CO; R4 = H, Me; R5 = H, Cl-3 alkyl, or is absent if G = H; R6 = H, Me; U = CHR7(CH2)nCHR8, K(R7):K(R8), Q1-Q3; R7, R8 = H, C1-10 alkyl, aryl, arylalkyl, halo, NO2, substituted amino, OH, acyloxy, CO2H, CN, etc; K = C, N; W = H, arylacyl, heteroarylacyl, arylC1-3 alkylsulfonyl, (un)substituted arylsulfonyl, arylC1-4 alkenylsulfonyl, C1-8 alkylsulfonyl, heteroarylC1-3 alkylsulfonyl, heteroarylsulfonyl, aryloxycarbonyl, C1-6 alkyloxycarbonyl, arylC1-3 alkyloxycarbonyl, arylaminocarbonyl, C1-6 alkylaminocarbonyl, arylC1-3 alkylaminocarbonyl, carboxyC0-3 alkylcarbonyl, or is absent if G = H; X, Z = NR'R'', NHC(NR'R''):NH, NHC(NHR'):NR'', NHCR':NR'', SC(NR'R''):NH, SC(NHR'):NR'', C(NR'R''):NH, C(NHR'):NR'', CR':NR''; R', R'' = H, C1-6 alkyl, arylC1-3 alkyl, aryl; R'R'' = cyclic ring contg. (CH2)p, p = 2-5] or their pharmaceutically acceptable salts were prepd. for inhibition of factor Xa. I are useful in vitro or in vivo for preventing or treating coagulation disorders. Thus, H-D-Arg-Gly-Argthiazole, prepd. in several steps from thiazole, protected arginine derivs., and glycine, inhibited factor Xa, prothrombinase, and thrombin with IC50 values of 0.011, 0.010, and 41 .mu.M, resp., while PhCH2SO2-D-Arq-Gly-Arq-thiazole showed IC50 values of 0.00065, 0.00045, and 10 .mu.M, resp.

IT 186304-25-6P 186304-32-5P 186304-41-6P 186304-70-1P 186304-89-2P 186305-33-9P 186305-78-2P 186305-89-5P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of ketoheterocyclic peptide derivs. as inhibitors of factor Xa)

REFERENCE COUNT:

74

REFERENCE(S):

- (1) Abe; US 5153176 1992 HCAPLUS
- (2) Almquist, R; J Med Chem 1980, V23, P1392 HCAPLUS
- (3) Anon; 1982 HCAPLUS
- (4) Anon; EP 0045665 A1 1982 HCAPLUS
- (5) Anon; EP 0195212 A3 1986 HCAPLUS
- ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER: 1998:146693 HCAPLUS

DOCUMENT NUMBER:

128:205143

TITLE:
INVENTOR(S):

Preparation of peptidyl inhibitors of factor Xa Marlowe, Charles K.; Scarborough, Robert M.; Laibelman, Alan M.; Sinha, Uma; Zhu, Bing-yan

PATENT ASSIGNEE(S):

COR Therapeutics, Inc., USA

SOURCE:

U.S., 25 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

KIND DATE

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_ US 1995-485433 19950607 19980224 US 5721214 MARPAT 128:205143 OTHER SOURCE(S): Novel compds. ZQ(CH2)mCHR4(GWR5)C(:E)DR3CR2R6C(:J)NR1CHY(CH2)nAX [m, n = 0]0-4; Y = CHO, COCF3, COCF2CF3, etc.; A = absent, piperidinyl, pyrrolidinyl, cyclopropyl, Ph, etc.; R1, R2, R3 = H, alkyl; R4 = H, Me; J, E = O, H2; D = N, CH, NCH2, NCH2CH2, CHCH2; Q = absent, piperidinyl, pyrrolidinyl, cycloalkyl, Ph, naphthyl, pyridyl, etc.; G = N, CH, H; R5 = H, alkyl, or absent; R6 = H, Me; W = absent, H, arylacyl, heteroarylacyl, arylsulfonyl, alkylaminocarbonyl, etc.; X, Z = NR'R'', NHC(NR'R''):NH, NHC(NHR'):NR'', SC(NR'R''):NH, etc. (R' and R'' are H, alkyl, arylalkyl, aryl or R'R'' is alkylene)] or their salts were prepd. as factor Xa inhibitors. Thus, Boc-D-Arg-Gly-Arg-H (Boc = tert-butoxycarbonyl) was prepd. by redn.-hydrogenolysis of Boc-D-Arg(Cbz2)-Gly-Arg(N-Cbz)-lactam (Cbz = benzyloxycarbonyl), which was prepd. by peptide coupling in soln. The product was evaluated in rabbits for biol. half-life, antithrombotic efficacy, and effects on hemostasis and hematol. parameters.

186369-67-5P 186369-79-9P 203934-81-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of peptidyl inhibitors of factor Xa)

ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER:

1997:124456 HCAPLUS

DOCUMENT NUMBER:

126:131782

TITLE:

Preparation of ketoheterocyclic peptide derivatives as

APPLICATION NO. DATE

inhibitors of factor Xa

INVENTOR(S):

Marlowe, Charles K.; Scarborough, Robert M.;

PATENT ASSIGNEE(S):

Laibelman, Alan M.; Sinha, Uma; Zhu, Bing-Yan Cor Therapeutics, Inc., USA; Marlowe, Charles K.; Scarborough, Robert M.; Laibelman, Alan M.; Sinha,

Uma; Zhu, Bing-Yan

SOURCE:

PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT !	NO.		KIND DATE APPLICATION NO. DATE													
WO	9640	 744		A	A1 19961219 WO 1996-US9290 19960605												
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	ΕĖ,
		ES,	FΙ,	GB,	GE,	HU,	IL,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	KΖ,	LK,	LR,	LS,
		LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NΖ,	PL,	PT,	RO,	RU,	SD,
		SE,															
	RW:	ΚE,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,
		IE,	IT,	LU,	MC,	NL,	PT,	SE,	ΒĒ,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN	
	6069													1995			
	2224																
ΑU	9664	761		Α	1	1996	1230		A	J 19	96-6	4761		1996	0605		
ΑU	7023	60		В	2	1999	0218										
EΡ	8321													1996			
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	ΝL,	SĒ,	MC,	PT,
		IE,															
JР	1150	7337		T	2	1999	0629		J	P 19	96-5	0164		1996			
ZA	9604	754		A		1997	0311		$\mathbf{Z}_{i}$	A 19	96-4	754		1996	0606		

US 6197748

B1 20010306

US 1998-77002

19980515

PRIORITY APPLN. INFO.:

US 1995-486010 WO 1996-US9290 A 19950607 W 19960605

OTHER SOURCE(S):

MARPAT 126:131782

GΙ

$$H_{2N}$$
 $H_{NH}$ 
 $H$ 

Novel title compds. I [m, n, p, q = independently 0-4; A = piperidinyl,AΒ pyrrolidinyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, Ph, C3-6 heteroaryl, or is absent; D = N, CH, NCH2, NCH2CH2, CHCH2; E = O, H2; G = ON, CH, H; M = NH, NMe, O, S, S(O), SO2, CH2, or is absent; J = O, H2; R1-R3 = independently H, C1-3 alkyl; R2R3 = CH2YCH2; R4 = H, Me; R5 = H, C1-3 alkyl, or is absent if G = H; R6 = H, Me; U = CHR7(CH2)sCHR8, K(R7):K(R8), Q1-Q3; R7, R8 = independently H, C1-10 alkyl, aryl, arylalkyl, halo, NO2, substituted amino, OH, acyloxy, CO2H, CN, etc; K = CH, N; W = H, arylacyl, heteroarylacyl, arylC1-3alkylsulfonyl, (un) substituted arylsulfonyl, arylC1-4 alkenylsulfonyl, C1-8 alkylsulfonyl, heteroarylC1-3alkylsulfonyl, heteroarylsulfonyl, aryloxycarbonyl, C1-6alkyloxycarbonyl, arylC1-3alkyloxycarbonyl, arylaminocarbonylC1-6alkylaminocarbonyl, arylC1-3alkylaminocarbonyl, carboxyC0-3alkylcarbonyl, or is absent if G = H; X, Z = independently = H, C1-3 alkyl, NR'R", NHC(NR'R"):NH, NHC(NHR'):NR", NHCR':NR", SC(NR'R"):NH, SC(NHR'):NR", C(NR'R"):NH, C(NHR'):NR", CR':NR"; R', R" = independently H, C1-6 alkyl, C1-3 arylalkyl, aryl; R'R" = cyclic ring contg. (CH2)r, r = 2-5; Y = NH, S, O, CH2, CH(OH), CH2CH2, CO], their salts and compns. related thereto having activity against mammalian factor Xa are disclosed. I are useful in vitro or in vivo for preventing or treating coagulation disorders. Thus, ketothiazole peptide II (R = H), prepd. in several steps from thiazole and Boc-Arg(Tos)-OSu (Boc = Me3CO2C; Tos = tosyl; Su = succinimido) (prepn. given) inhibited factor Xa, prothrombinase, and thrombin with IC50 values of 0.011, 0.010, and 41 .mu.M, resp., while I (R = PhCH2SO2) showed IC50 values of 0.00065, 0.00045, and 10 .mu.M, resp.

IT 186304-25-6 186304-32-5 186304-41-6 186304-70-1 186304-89-2 186305-33-9 186305-78-2 186305-89-5

RL: BAC (Biological activity or effector, except adverse); THU

### Walicka 09/657986

(Therapeutic use); BIOL (Biological study); USES (Uses) (prepn. of ketoheterocyclic peptide derivs. as inhibitors of factor Xa)

ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER: 1997:121403 HCAPLUS 126:131783 DOCUMENT NUMBER: TITLE:

Preparation of peptides as inhibitors of factor Xa Marlowe, Charles K.; Scarborough, Robert M.; INVENTOR(S):

Laibelman, Alan M.; Sinha, Uma; Zhu, Bing-yan

Cor Therapeutics, Inc., USA; Marlowe, Charles K.; PATENT ASSIGNEE(S):

Scarborough, Robert M.; Laibelman, Alan M.; Sinha,

Uma; Zhu, Bing-Yan

SOURCE: PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

I	PAT	CENT I	NO.	O. KIND DATE APPLICATION NO.							٥.	DATE						
		9640° 9640°								WO 1996-US9285					19960605			
•	,,,		AL,	AM,	AT,	ΑU,	AZ,	BB,							CZ, KZ,			
				LU,											PT,			
		RW:	ΚE,	LS,											FI,			GR,
		5919	765		Α		1999	0706		U	S 19	95-4	8347	0		0607	GIN	
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1	ĽР		AT,	BE,											NL,		MC,	PT,
		1150									P 19	96-5	0163	9	1996	0605		
PRIOR:		6245 7 APP			В.	1	2001	0612		U US 1			7001 70		1998 1995			
LICIOIC				11110											1996			

#### MARPAT 126:131783 OTHER SOURCE(S):

Peptides R1(CH2)pX1(CH2)mCR2(X2R3R4)C(:Y1)X3R5CR6R7C(:Y2)NR8CHR9(CH2)nX4(C H2)qR10 (X1 = piperidinyl, pyrrolidinyl, cycloalkyl, Ph, substituted Ph, naphthyl, pyridyl, or null; X2 = N, CH, H; X3 = N, CH, NCH2, NCH2CH2, CHCH2; X4 = piperidinyl, pyrrolidinyl, cycloalkyl, Ph, heteroaryl, or null; R1 = H, alkyl, amino, etc.; R2, R6 = H, Me; R3 = H, arylacyl, heteroarylacyl, arylalkylsulfonyl, etc.; R4 = H, alkyl or is absent if X2 is H; R5, R7, R8 = H, alkyl; R9 = CHO, COCF3, COCF2CF3, etc.; R10 = H, alkyl, amino, etc.; Y1, Y2 = 0, H2; m, n, p, q = 0-4) and their pharmaceutically acceptable salts, prodrugs, etc. were prepd. as inhibitors of factor Xa. The compds. are useful in vitro or in vivo for preventing or treating coagulation disorders. Thus, Boc-D-Arg-Gly-Arg-H (I, Boc = tert-butoxycarbonyl) was prepd. from Boc-Arg(Z)-OH (Z = benzyloxycarbonyl), Boc-Gly-OH, and Boc-D-Arg(Z2)-OH via peptide couplings of arginine lactam intermediates. Peptide I was evaluated for biol. half-life, antithrombotic efficacy, and effects on hemostasis and hematol. parameters.

#### 186369-67-5P 186369-79-9P 186369-90-4P ΙT

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of peptides as inhibitors of factor Xa)

=> fil caold

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FILE COVERS 1907-1966 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s 13

L5 0 L3

=>

=>

=> fil reg

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STRUCTURE FILE UPDATES: 16 JUL 2001 HIGHEST RN 346403-73-4 DICTIONARY FILE UPDATES: 16 JUL 2001 HIGHEST RN 346403-73-4

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search limits have been increased. See  $\ensuremath{\mathsf{HELP}}$  SLIMIT for details.

=> d 13 tot

L3 ANSWER 1 OF 13 REGISTRY COPYRIGHT 2001 ACS

RN 334953-82-1 REGISTRY

CN Glycinamide, 3-(aminoiminomethyl)-N-[[2-[4-(methoxycarbonyl)phenyl]ethoxy] carbonyl]-D-phenylalanyl-N-[(3S)-1-(aminoiminomethyl)-2-hydroxy-3-piperidinyl]-N2-methyl- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C30 H40 N8 O7

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L3 ANSWER 2 OF 13 REGISTRY COPYRIGHT 2001 ACS

RN 203934-81-0 REGISTRY

CN L-Argininamide, 3-(aminoiminomethyl)-N-[(phenylmethyl)sulfonyl]-D-phenylalanylglycyl- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C25 H35 N9 O5 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

$$H_2N$$
 $H_2N$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_2$ 
 $H_1$ 
 $H_2$ 
 $H_1$ 
 $H_2$ 
 $H_3$ 
 $H_4$ 
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 $H_4$ 
 $H_5$ 
 $H_4$ 
 $H_5$ 
 $H_5$ 
 $H_6$ 
 $H_7$ 
 $H_7$ 

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L3 ANSWER 3 OF 13 REGISTRY COPYRIGHT 2001 ACS

RN 186369-90-4 REGISTRY

CN Glycinamide, 3-(aminoiminomethyl)-N-[(phenylmethyl)sulfonyl]-Dphenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(aminooxoacetyl)butyl](9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C26 H35 N9 O6 S

SR CF

LC STN Files: CA, CAPLUS, USPATFULL

$$H_{2}N$$
 $H_{2}N$ 
 $H_{3}$ 
 $H_{4}$ 
 $H_{5}$ 
 $H_{5}$ 
 $H_{5}$ 
 $H_{6}$ 
 $H_{7}$ 
 $H_$ 

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L3 ANSWER 4 OF 13 REGISTRY COPYRIGHT 2001 ACS

RN 186369-79-9 REGISTRY

CN Glycinamide, 3-(aminoiminomethyl)-N-[(phenylmethyl)sulfonyl]-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-formylbutyl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C25 H34 N8 O5 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

$$H_2N$$
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_1$ 
 $H_2$ 
 $H_1$ 
 $H_2$ 
 $H_3$ 
 $H_4$ 
 $H_4$ 
 $H_4$ 
 $H_5$ 
 $H_5$ 
 $H_6$ 
 $H_7$ 
 $H_7$ 

- 2 REFERENCES IN FILE CA (1967 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)
- L3 ANSWER 5 OF 13 REGISTRY COPYRIGHT 2001 ACS

RN 186369-67-5 REGISTRY

CN Glycinamide, 3-(aminoiminomethyl)-N-[(1,1-dimethylethoxy)carbonyl]-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-formylbutyl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C23 H36 N8 O5

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

- 2 REFERENCES IN FILE CA (1967 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

### Walicka 09/657986

- L3 ANSWER 6 OF 13 REGISTRY COPYRIGHT 2001 ACS
- RN 186305-89-5 REGISTRY
- CN Glycinamide, 3-(aminoiminomethyl)-N-[(phenylmethyl)sulfonyl]-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-[(4,5-dihydro-2-oxazolyl)carbonyl]butyl]- (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C28 H37 N9 O6 S
- SR CA
- LC STN Files: CA, CAPLUS, USPATFULL

### Absolute stereochemistry.

- 3 REFERENCES IN FILE CA (1967 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)
- L3 ANSWER 7 OF 13 REGISTRY COPYRIGHT 2001 ACS
- RN 186305-78-2 REGISTRY
- CN Glycinamide, 3-(aminoiminomethyl)-N-[(1,1-dimethylethoxy)carbonyl]-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-[(4,5-dihydro-2-oxazolyl)carbonyl]butyl]- (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C26 H39 N9 O6
- SR CA
- LC STN Files: CA, CAPLUS, USPATFULL

$$H_2N$$
 $H_2N$ 
 $H_2N$ 
 $H_2N$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_1$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_$ 

- 3 REFERENCES IN FILE CA (1967 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)
- L3 ANSWER 8 OF 13 REGISTRY COPYRIGHT 2001 ACS
- RN 186305-33-9 REGISTRY
- CN Glycinamide, 3-(aminoiminomethyl)-N-[(phenylmethyl)sulfonyl]-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2-benzoxazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

STEREOSEARCH FS

C32 H37 N9 O6 S MF

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

## Absolute stereochemistry.

- 3 REFERENCES IN FILE CA (1967 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)
- ANSWER 9 OF 13 REGISTRY COPYRIGHT 2001 ACS L3
- RN
- $\begin{array}{lll} 186304-89-2 & \text{REGISTRY} \\ \text{Glycinamide,} & 3-(\text{aminoiminomethyl})-N-[(\text{phenylmethyl})\,\text{sulfonyl}]-D-\\ \end{array}$ ĊN phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2oxazolylcarbonyl)butyl] - (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C28 H35 N9 O6 S
- SR CA
- CA, CAPLUS, USPATFULL LCSTN Files:

# Absolute stereochemistry.

- 3 REFERENCES IN FILE CA (1967 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)
- ANSWER 10 OF 13 REGISTRY COPYRIGHT 2001 ACS L3
- RN
- 186304-70-1 REGISTRY Glycinamide, 3-(aminoiminomethyl)-N-[(1,1-dimethylethoxy)carbonyl]-D-CN phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2oxazolylcarbonyl)butyl] - (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- C26 H37 N9 O6 MF
- SR CA
- STN Files: CA, CAPLUS, USPATFULL ·LC

3 REFERENCES IN FILE CA (1967 TO DATE) 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

ANSWER 11 OF 13 REGISTRY COPYRIGHT 2001 ACS L3

RN

186304-41-6 REGISTRY Glycinamide, 3-(aminoiminomethyl)-N-[(phenylmethyl)sulfonyl]-D-CN phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

FS STEREOŞEARCH

C32 H37 N9 O5 S2 MF

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

ANSWER 12 OF 13 REGISTRY COPYRIGHT 2001 ACS L3

186304-32-5 REGISTRY RN

Glycinamide, 3-(aminoiminomethyl)-N-[(phenylmethyl)sulfonyl]-D-CNphenylalanyl-N-[(lS)-4-[(aminoiminomethyl)amino]-1-(2thiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

C28 H35 N9 O5 S2 MF

SR

CA, CAPLUS, USPATFULL LC STN Files:

3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

ANSWER 13 OF 13 REGISTRY COPYRIGHT 2001 ACS L3

RN

CN phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2thiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C26 H37 N9 O5 S

SR CA

LCCA, CAPLUS, USPATFULL STN Files:

$$H_2N$$
 $H_2N$ 
 $H_2N$ 
 $H_2N$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_2N$ 
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 $H_1$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_1$ 
 $H_2N$ 
 $H_1$ 
 $H_1$ 
 $H_2$ 
 $H_$ 

- 3 REFERENCES IN FILE CA (1967 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)